

Discussion on "Power Coupler Design for RIA" by Brian Rusnak

Shepard commented on the issue of port size again. He agrees that there are nice features like easier processing that speak for large ports. He explained that RIA for the prototypes so far used 2 inches for it seemed adequate for the 5-10 kW power levels they expect to transmit. This statement is supported by the evaluation presented by Rusnak in this talk.

Rusnak added that for the 3-spoke resonator and for the kind of microphonics compensation selected this might have to be revisited. Shepard pointed out that this might require moving the RF-joint, where the coupler is attached to the cavity further out from the outer cavity dimension. This increases size and cost of the cryomodule. A trade-off might have to be done.